AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1-58 (canceled).

59. (new): An index structure for metadata divided into fragments, comprising a list of multi-keys which correspond to a combination of fields of the metadata, and location information for defining a multi-key of the list.

60. (new): The index structure as claimed in claim 59, further comprising values of the multi-key and identification information of the metadata corresponding to the values of the multi-key.

61. (new): The index structure as claimed in claim 60, wherein the identification information of the metadata comprises identification information on ones of the fragments of the metadata corresponding to the values of the multi-key.

62. (new): The index structure as claimed in claim 59, wherein the location information is expressed in XPath.

63. (new): The index structure as claimed in claim 59, wherein at least a part of the location information is expressed as a predetermined code.

64. (new): The index structure as claimed in claim 59, wherein the location information comprises location information of a fragment including the multi-key and location information of the multi-key within the fragment.

65. (new): The index structure as claimed in claim 59, wherein the metadata is metadata as defined in the TVA Forum.

66. (new): The index structure as claimed in claim 59, further comprising:

a sub-section including ranges of values of the multi-key and identification information on ones of the fragments of the metadata corresponding to the values of the multi-key; and

a section including representative key values representing the respective ranges of values of the multi-key.

67. (new): The index structure as claimed in claim 66, wherein each of the representative key values is a value among the corresponding range of values of the multi-key.

68. (new): The index structure as claimed in claim 66, wherein:

the list includes identification information on the section; and

the section further includes identification information on the sub-section.

69. (new): An index structure for metadata divided into fragments, comprising:

values of multi-keys; and

identification information of the metadata corresponding to the values of the multi-keys, wherein the multi-keys correspond to a combination of fields of the metadata.

70. (new): The index structure as claimed in claim 69, further comprising a list of the multi-keys.

71. (new): The index structure as claimed in claim 70, further comprising location information for defining the multi-keys, wherein at least a part of the location information is expressed as a predetermined code.

72. (new): The index structure as claimed in claim 69, wherein the identification information of the metadata comprises identification information of ones of the fragments of the metadata corresponding to the values of the multi-keys.

73. (new): The index structure as claimed in claim 69, wherein for a multi-key of the multi-keys, the index structure further comprises a representative value representing a predetermined range of the values of the multi-key.

74. (new): The index structure as claimed in claim 69, wherein for a multi-key of the multi-keys, the index structure further comprises:

a sub-section comprising ranges of values of the multi-key and identification information on ones of the fragments of the metadata corresponding to the values of the multi-key; and

a section comprising representative key values representing the respective ranges of values of the multi-key.

75. (new): The index structure as claimed in claim 69, wherein with respect to comparison of the values of a multi-key in size, the multi-key comprises fields (k1, k2, k3...kn) of the metadata which are prioritized (k1>k2>k3>...Kn), and the combined fields are compared in sequence, starting from a first field having a highest order of priority, wherein the values are compared on an arithmetic basis where the values of the multi-key are numerical or ranked in lexicographical order where the values of the multi-key are alphabetical.

76. (new): The index structure as claimed in claim 75, wherein first and second values of the multi-key corresponds to (a1, a2, a3...an) and (b1, b2, b3...bn), respectively, and the first and second values (a1, a2, a3...an) and (b1, b2, b3...bn) of the multi-key are determined to be of the same size where there is no field having a different size.

77. (new): An index structure for metadata divided into fragments, comprising:

a key index list section comprising a list of multi-keys, each multi-key corresponding to a combination of fields of the metadata;

a key index section; and

a sub-key index section, wherein for a multi-key of the key index list:

· the sub-key index section comprises ranges of values of the multi-key and identification information on ones of the fragments of the metadata corresponding to the values of the multi-key, and

the key index section comprises representative key values representing the respective ranges of values of the multi-key.

78. (new): The multi-key index structure as claimed in claim 77, wherein the key index list section further comprises location information for defining the multi-keys, wherein at least a part of the location information is expressed as a predetermined code.

79. (new): A computer readable medium containing a data structure for storing an index for metadata divided into fragments, the index provided to search the metadata, the data structure

comprising a list of multi-keys which correspond to a combination of fields of the metadata, and location information for defining a multi-key of the list.

80. (new): A computer readable medium containing a data structure for storing an index for metadata divided into fragments, the index provided to search the metadata, the data structure comprising:

values of multi-keys; and

identification information of the metadata corresponding to the values of the multi-keys, wherein the multi-keys correspond to a combination of fields of the metadata.

81. (new): A computer readable medium containing a data structure for storing an index for metadata divided into fragments, the index provided to search the metadata, the data structure comprising:

a key index list section comprising a list of multi-keys, each multi-key corresponding to a combination of fields of the metadata;

a key index section; and

a sub-key index section, wherein for a multi-key of the key index list:

the sub-key index section comprises ranges of values of the multi-key and identification information on ones of the fragments of the metadata corresponding to the values of the multi-key, and

the key index section comprises representative key values representing the respective ranges of values of the multi-key.